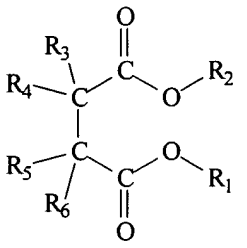
AMENDMENTS TO THE CLAIMS

1. (currently amended) A solid catalyst component for the (co)polymerization of olefins comprising titanium, magnesium, halogen and a succinate, which is obtained by a process comprising the following steps:
   (a) dissolving a halide of magnesium in a solvent system comprising an organic epoxy compound or an organic phosphorus compound and optionally an inert diluent, thereby forming a solution;
   (b) mixing the solution of step (a) with a titanium compound, thereby forming a mixture;
   (c) precipitating a first solid from the mixture of step (b) in the presence of ~~at least one of~~ a succinate, ~~and~~ an auxiliary precipitant, or mixtures thereof;
   (d) if a succinate is not used in step (c), contacting the first solid of step (c) with a succinate, thereby forming a second solid, and
   (e) treating the solid of step (c) or (d) with a titanium compound optionally in the presence of an inert diluent.
2. (previously presented) The catalyst component according to claim 1 wherein the auxiliary precipitant is selected from organic anhydrides, organic acids, ethers, aldehydes and ketones.
3. (previously presented) The catalyst component according to claim 1 wherein the auxiliary precipitant is selected from acetic anhydride, phthalic anhydride, succinic anhydride, maleic anhydride, pyromellitic dianhydride, acetic acid, propionic acid, butyric acid, acrylic acid, methacrylic acid, acetone, methyl ethyl ketone, benzophenone, dimethyl ether, diethyl ether, dipropyl ether, dibutyl ether, diamyl ether and mixtures thereof.
4. (previously presented) The catalyst component according to claim 1 wherein the halide of magnesium is magnesium dichloride.
5. (previously presented) The catalyst component according to claim 1 wherein the organic epoxy compound is selected from the group consisting of oxides of aliphatic olefins, aliphatic diolefins, halogenated aliphatic olefins, halogenated aliphatic diolefins, glycidyl ethers, and cyclic ethers, the organic epoxy compound having 2-8 carbon atoms.
6. (previously presented) The catalyst component according to claim 1 wherein the titanium compound has the formula $TiX_n(OR)_{4-n}$ wherein X is a halogen, each R is independently a hydrocarbyl group and n is an integer of from 0 to 4.

7. (previously presented) The catalyst component according to claim 6 wherein the titanium compound is selected from the group consisting of titanium tetrachloride, titanium tetrabromide, titanium tetraiolide, tetrabutoxy titanium, tetraethoxy titanium, chlorotriethoxy titanium, dichlorodiethoxy titanium, and trichloroethoxy titanium.
8. (previously presented) The catalyst component according to claim 1 wherein the succinate is selected from those having the formula (I) :



wherein the radicals R_1 and R_2, equal to or different from each other, are a C_1-C_{20} linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms; the radicals R_3 to R_6 equal to or different from each other, are hydrogen or a C_1-C_{20} linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms, further, the radicals R_3 to R_6 can be linked together to form a cycle.

9. (previously presented) The catalyst component according to claim 8 wherein in the succinate of formula (I), R_1 and R_2 are C_1-C_8 alkyl, cycloalkyl, aryl, arylalkyl and alkylaryl groups.
10. (previously presented) The catalyst component according to claim 8 wherein in the succinate of formula (I), R_3 to R_5 are hydrogen and R_6 is a branched alkyl, cycloalkyl, aryl, arylalkyl and alkylaryl radical having from 3 to 10 carbon atoms.
11. (previously presented) The catalyst component according to claim 8 wherein in the succinate of formula (I), at least two radicals from R_3 to R_6 are different from hydrogen and are selected from C_1-C_{20} linear or branched alkyl, alkenyl, cycloalkyl, aryl, arylalkyl or alkylaryl group, optionally containing heteroatoms.
12. (previously presented) The catalyst component according to claim 11 wherein in the succinate of formula (I), the at least two radicals from R_3 to R_6 different from hydrogen are linked to different carbon atoms.
13. (currently amended) A catalyst for the polymerization of olefins CH_2=CHR, in which R is

hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, comprising the product of the reaction between: (A) a solid catalyst component

comprising titanium, magnesium, halogen and a succinate, which is obtained by a process comprising the following steps:

(a) dissolving a halide of magnesium in a solvent system comprising an organic epoxy compound or an organic phosphorus compound and optionally an inert diluent, thereby forming a solution;

(b) mixing the solution of step (a) with a titanium compound, thereby forming a mixture;

(c) precipitating a first solid from the mixture of step (b) in the presence of ~~at least one of~~ a succinate, ~~and~~ an auxiliary precipitant or mixtures thereof;

(d) if a succinate is not used in step (c), contacting the first solid of step (c) with a succinate, thereby forming a second solid, and

(e) treating the solid of step (c) with a titanium compound optionally in the presence of an inert diluent;

(B) an alkylaluminum compound; and, optionally, (C) at least one electron-donor compound (external donor).

14. (currently amended) The catalyst according to claim 13 in which the alkylaluminum compound ~~(b)~~(B) is a trialkyl aluminum compound.

15. (previously presented) The catalyst according to claim 13 in which the external donor (C) is a silicon compound of formula $R_a^5R_b^6Si(OR^7)_c$, where a and b are integers from 0 to 2, c is an integer from 1 to 4 and the sum (a+b+c) is 4; R^5, R^6 and R^7 are alkyl, cycloalkyl or aryl radicals with 1-18 carbon atoms optionally containing heteroatoms.

16. (original) The catalyst according to claim 15 in which a is 1, b is 1 and c is 2.

17. (previously presented) The catalyst according to claim 15 in which at least one of R^5 and R^6 are branched alkyl, cycloalkyl or aryl groups with 3-10 carbon atoms optionally containing heteroatoms and R^7 is a C_1-C_{10} alkyl group.

18. (original) The catalyst according to claim 15 in which a is 0, c is 3 and R^6 is a branched alkyl or cycloalkyl group and R^7 is methyl.

19. (currently amended) A process for the (co)polymerization of olefins CH_2=CHR, in which R is hydrogen or a hydrocarbyl radical with 1-12 carbon atoms, carried out in the presence of a catalyst comprising the product of the reaction between: (A) a solid catalyst component

comprising titanium, magnesium, halogen and a succinate, which is obtained by a process comprising the following steps:

(a) dissolving a halide of magnesium in a solvent system comprising an organic epoxy compound or an organic phosphorus compound and optionally an inert diluent thereby forming a solution;

(b) mixing the solution of step (a) with a titanium compound, thereby forming a mixture;

(c) precipitating a first solid from the mixture of step (b) in the presence of ~~at least one of~~ a succinate, ~~and~~ an auxiliary precipitant, or mixtures thereof;

(d) if a succinate is not used in step (c), contacting the solid of step (c) with a succinate, thereby forming a second solid, and

(e) treating the solid of step (c) or (d) with a titanium compound optionally in the presence of an inert diluent; and

(B) an alkylaluminum compound; and, optionally, (C) at least one electron-donor compound (external donor).

20. (previously presented) The catalyst according to claim 17 wherein the C_1-C_{10} alkyl group is methyl.